Overview

The Future Software Systems Architectures (FSSA) project jointly funded by the Disruptive Technology Innovation Fund (established by the Department of Business, Enterprise & Innovation), FINEOS and FourTheorem is a major new project at Lero / Dublin City University which will address a key emerging need in the global software business: how to migrate existing ICT systems to serverless microservices based architectures.

DCU are known established innovators who undertake leading-edge research in the software architecture field, and this experience is supplemented with the extensive know-how of FINEOS, a global market leader in core systems for life, accident and health insurance. FourTheorem are software architectural specialists and noted software innovators.

This is a ground-breaking innovative project, utilising leading-edge software architecture and machine learning techniques to address the challenge of migrating to future software systems paradigms.

Opportunity

This project presents the successful candidate with the opportunity to work in an exciting, fast moving and excellent technical environment, and to take the lead on managing the research project. The motivation of the team is to grow this research-led initiative into not just a leading centre of excellence for future software systems, but also to enable effective commercialisation of research work products.
Responsibilities

Reporting to the project lead Dr. Paul Clarke the Senior Research Fellow (SRF) will:

- Act as senior researcher, guiding research and agile software engineering within the project
- Demonstrate a commitment to quality over expediency in software development
- Engage regularly and effectively with project partners
- Contribute to innovations in the project and identify creative solutions to challenging software architectural and implementation problems
- Supervise and mentor junior staff on research aspects and on good programming practices

Skills

At this stage of the project, the SRF has an opportunity to propose implementation details most appropriate to the challenges encountered although the following is a strong indication of possible knowledge:

- Large scale java object oriented project implementations
- Understanding of AI values as applied in software development, e.g. clustering analysis and spectral clustering.
- Backend development, server-side development including database layer (e.g. Python, Django/Flask, Node.js)
- Cloud skills / deployments including dev-ops (e.g. Nginx, Puppet, Ansible)
- Knowledge of architectural patterns for OO monolithic and distributed software architectures
- Microservice and/or Function as a Service implementation
- Excellent written and verbal communication and interpersonal skills.

Minimum Criteria

Candidate will hold a minimum of a PhD degree. Additional industrial experience in large-scale software implementation would be desirable. Strong software and programming skills are essential. Candidates should be able to present a portfolio of projects and demonstrate evidence of a willingness to steer projects.

Mandatory Training

The postholder will be required to undertake the following mandatory compliance training: Orientation, Health & Safety and Data Protection (GDPR). Other training may need to be undertaken when required.

For informal discussions email Dr. Paul Clarke at paul.m.clarke@dcu.ie

Please do not send applications to this email address, instead apply as described below.
Salary Scale: €66,559 - €71,429 (Senior Research Fellow, Level 4)

*Appointment will be commensurate with qualifications and experience, and will be made on the appropriate point of the Senior Research Fellow IV salary scale in line with current Government pay policy.

Closing date: 24th January 2020

Application Procedure

Application forms are available from the DCU Current Vacancies (open Competitions) website at http://www.dcu.ie/vacancies/current.shtml and also from the Human Resources Department, Dublin City University, Dublin 9. Tel: +353 (0) 1 700 5149.

Please clearly state the role that you are applying for, including the job reference, in your application and email subject line:

#RF1308 Senior Research Fellow - The Futures Software Systems Architectures Project

Applications should be submitted by email to hr.applications@dcu.ie or by post to the Human Resources Department, Dublin City University, Dublin 9

Dublin City University is an equal opportunities employer and is committed to promoting gender equality reflected in its attainment of the Athena SWAN Bronze Award. Information on a range of university policies aimed at creating a supportive and flexible work environment are available at www4.dcu.ie/policies/policy-starter-packs.shtml.